

that the driver for the network function must be provided for the OS that is running on the Open IP Services Platform 30.

**[0072]** One aspect of the Open IP Services Platform 30

5 that is of particular importance to the present invention is that a plurality of the Open IP Services Platforms 30 can communicate with each other at wire speed. This is advantageous when, for example, a particular function is not being performed fast enough in one particular unit.

10 Just one function can be rerouted at wire speed to another Open IP Services Platform 30.

**[0073]** Consider an Open IP Services Platform 30 that is performing the functions of a server that is providing

FTP, web services, mail services, etc. It is possible to

15 assign any of the services to different servers (Open IP Services Platforms 30), at wire speed, to keep performance at a desired level. The present invention can also

reconfigure the Open IP Services Platform 30 on the fly such that when certain performance bottlenecks are being

20 reached, the Open IP Services Platform 30 will reassign functions as previously defined by the administrator.

**[0074]** Another feature of the present invention is that

both configurations of the Open IP Services Platform 30 provide keyboard, mouse, and monitor ports. Thus, the Open IP Services Platform 30 is capable of operating as a full-fledged server that a developer can work on directly.

5     **[0075]**     It is observed that the physical dimensions of the Open IP Services Platform 30 are also industry standard for use in data centers and other facilities that use rack mounted equipment. The dimensions vary from a 1U-high to a 3U-high unit that are rack-mountable.

10    **[0076]**     Another novel aspect of the invention that increases versatility is the type of environments in which the Open IP Services Platform 30 can operate. Small businesses are often stashing network components into closets or other tight spaces. This closed environment  
15    typically runs hotter than a room with its own thermostat. Accordingly, the Open IP Services Platform 30 would normally run at a higher than optimal temperature. Another aspect of the invention is to provide a solid state refrigeration unit. This aspect is especially  
20    important when considering the commercial and industrial locations where the Open IP Services Platform 30 will be used. This is also more important for the REACTORPRO(TM)

model that includes hard drives. Hard drives are especially vulnerable to high operating temperatures. The refrigeration unit can be disposed just on the hard drives themselves.

5       **[0077]**       With these features in mind, it is useful to consider the manner in which the present invention utilizes them to achieve novel advantages, while observing that the advantages are available to all of the targeted core markets of SPs, LECs and Enterprises. First, the  
10       invention provides a consolidated equipment solution. Managing a wide array of single-function, multi-vendor network devices creates high installation and management costs. The present invention consolidates the many functions performed by the individual network devices.  
15       The equipment consolidation can be partial or total, with a single device replacing entire racks of physical equipment. Consolidation of network functions solves a critical long-term build-out problem in Enterprise IT rooms, SP data centers, and in LEC central offices where  
20       equipment proliferation often overwhelms available power, air conditioning or physical space limitations.  
Consolidated equipment means that there are fewer